

CA1  
MT 76  
- A66



# NATIONAL ENERGY BOARD

## REASONS FOR DECISION

In the Matter of an Application under  
the National Energy Board Act

of

British Columbia Hydro and Power Authority

PART B - CERTIFICATE

January 1980



Canada

2  
NATIONAL ENERGY BOARD

3  
REASONS FOR DECISION

In the Matter of an Application Under  
the National Energy Board Act

of

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

PART B - CERTIFICATE

January 1980

Ce rapport est publié  
séparément dans les deux  
langues officielles.



## NATIONAL ENERGY BOARD

IN THE MATTER OF an application by British Columbia Hydro and Power Authority for:

Part A. The renewal, with modifications, of Licences EL-85, EL-87, EL-88 and EL-89, to export power under Part VI of the National Energy Board Act; and

Part B. The modification or replacement of Certificate of Public Convenience and Necessity EC-29.

(File: 1923-4/B4-6)

HEARD at Vancouver, British Columbia on 11 and 12 December 1979.

## BEFORE:

L.M. Thur	Presiding Member
J.L. Trudel	Member
R.B. Horner	Member

## APPEARANCES:

W.D. Mitchell	)	British Columbia Hydro and Power Authority
D.C. Duff	)	
D. Austin	)	
D. Melnychuk	)	British Columbia Institute of Agrologists
C. D'Arcy	)	British Columbia New Democratic Party Caucus
B. Ottway	)	
G. Kenyon	)	B.C. Wildlife Federation
D. Anderson	)	
K.C. Roberts	)	Canadian Scientific Pollution and Environmental Control Society
C. Stainsby	)	
M. Margolick	)	and Sierra Club of Western Canada
R. Fox	)	
A. Hulbert	)	City of Port Moody, Environmental Protection Committee
L. Holmes	)	



P. Dewdney	)	Cominco Limited
M. Rush	)	Communist Party of Canada
B. York	)	
D. Rosenbloom	)	Council for Yukon Indians
J. Aldridge	)	
D. Bryan	)	Council of Forest
R. Duggans	)	Industries of British Columbia
J. Lewis	)	Federation of B.C. Naturalists
P. Chataway	)	Greenpeace Okanagan
M. Anderson	)	Ladner Environmental Office
K. McAllister	)	Himself
P. Michiel	)	Peace Valley Environmental
	)	Association
S. Risingmoore	)	Texada Environmental Association
L. Mandell	)	Union of B.C. Indian Chiefs
L. Pinder	)	
A. Tomlinson	)	United Fishermen and Allied
J. Nichol	)	Workers' Union
P. Steele	)	Westcoast Transmission Company
	)	Limited
K.J. MacDonald	)	National Energy Board
A.R. Macdonald	)	



Digitized by the Internet Archive  
in 2023 with funding from  
University of Toronto

<https://archive.org/details/31761116379041>

TABLE OF CONTENTS

	<u>Page</u>
RECITAL	(i)
TABLE OF CONTENTS	(iii)
ABBREVIATIONS USED IN THE REPORT	(iv)
THE APPLICATION	1
ADJOURNMENT OF PART A	2
BACKGROUND TO PART B	3
THE EVIDENCE	4
* Facilities	4
Environmental Impact	5
Costs	6
INTERVENTIONS	6
DISPOSITION	7
APPENDICES	
1. British Columbia Hydro and Power Authority - International Power Line	
2. Amendments to Certificate EC-29	



ABBREVIATIONS USED IN THE REPORT

British Columbia Hydro and Power Authority	)	"the Applicant" or "B.C. Hydro"
Canadian Standards Association	)	"CSA"
National Energy Board	)	"the Board" or "NEB"
National Energy Board Act	)	"NEB Act"
United States of America	)	"U.S." or "United States"



THE APPLICATION

In an application dated 16 May 1979, B.C. Hydro applied to the Board for renewal with modifications of Licences EL-85, EL-87, EL-88 and EL-89, which will be referred to as Part A of the application.

By letter dated 13 June 1979, B.C. Hydro amended its application to apply also for the modification or replacement of its Certificate of Public Convenience and Necessity, EC-29, which will be referred to as Part B of the application.

The requested changes to the certificate were:

1. The international power line would originate at the Tsawwassen substation of B.C. Hydro. (The line now originates at the Delta substation.)
2. The international power line would have a length of 3.86 kilometres within Canada. (The line now has a length of 11.3 km (7.0 miles) in Canada.)
3. The line voltage would be increased from 12 000 volts to 25 000 volts in the Fall of 1979.
4. After the voltage increase, the designation of the line would be 25F52 Tsawwassen.
5. The corporate name in the Certificate would be changed from British Columbia Electric Railway Company Limited to British Columbia Hydro and Power Authority.



ADJOURNMENT OF PART A

At the commencement of the public hearing in Vancouver, B.C. on 11 December 1979, of the application of B.C. Hydro, four notices of motion for adjournment were presented to the Board. After hearing argument on the motions, the Board adjourned the hearing of Part A of the application until 22 January 1980.

The Board ordered that the hearing in respect of Part B of the application proceed.

Only matters pertaining to Part B of the application, the modification or replacement of Certificate of Public Convenience and Necessity EC-29, are contained in this volume of Reasons for Decision.

All items relevant to Part A of the application, the renewal with modifications of Licences EL-85, EL-87, EL-88 and EL-89 to export power under Part VI of the National Energy Board Act, will be included in Reasons for Decision which the Board intends to issue following the hearing of Part A.



BACKGROUND TO PART B

B.C. Hydro owns an international power line which supplies the isolated distribution system of Puget Sound Power and Light Company in the Point Roberts area of the United States, as illustrated by the maps in Appendix 1.

The line runs south from the Delta substation of B.C. Hydro. It crosses the international boundary beside 56th Street, Tsawwassen, B.C. The line is certificated to operate at 12 000 volts.

This line has been in existence for many years and the Certificate of Public Convenience and Necessity in respect of it, EC-29, was issued 21 January 1960 and has not been amended since.



THE EVIDENCE

The Applicant furnished the information required under the NEB Rules of Practice and Procedure Part III. The evidence that was presented is summarized below under the subheadings: Facilities, Environmental Impact and Costs.

Facilities

B.C. Hydro stated that a general upgrading of the Applicant's system in the Lower Fraser Valley had become necessary due to load growth in British Columbia and in the Point Roberts area of the United States.

The witness for B.C. Hydro stated that the international power line serving Point Roberts was the same feeder used to serve domestic loads in the community of Tsawwassen and that the export load represents about 10 per cent of the total load of 25 megawatts on the Tsawwassen distribution station. He testified that for many years the present system had been operated at 12 000 volts and that it had been converted to 25 000 volts operation before the 1979-80 winter peak to avoid possible service interruptions in Canada. The witness also stated that the international line is temporarily connected to a source designated 25F61TSW but that it would be connected to the 25F52TSW source mentioned in the application when this source becomes available some time before the 1980-81 winter peak.



The international power line described in Certificate EC-29 has a length of 11.3 km (7.0 miles) commencing at the Delta substation. The witness testified that it had become impossible to feed this area from the Delta substation and that the new substation at Tsawwassen was cut in at a distance of 3.86 km from the international border.

The Applicant provided evidence that the distance of 3.86 km referred to the overhead section of the power line. There would be an additional 600 metres of underground cable to connect the Tsawwassen substation to the existing overhead line.

Evidence was also provided that the international power line from Tsawwassen substation conforms to CSA Standard C22.3-1979, where applicable, for construction.

#### Environmental Impact

In its application, B.C. Hydro stated there would be no environmental impact arising from the changes to the international power line.

The evidence established that physical changes would be made only to the insulators, the load break switch and the metering facilities but not to the poles, the crossarms or the conductors.



The Applicant provided evidence that the international power line would conform to CSA Standard 108.3-1979 for radio and television interference.

Costs

In its application, B.C. Hydro stated that the costs of the Tsawwassen substation and of upgrading the international power line were necessitated by changes made to the domestic system and claimed, therefore, that no costs are relevant to its application.

INTERVENTIONS

The intervenors took no position with respect to Part B of the hearing.



DISPOSITION

Section 44 of the Act requires the Board, in considering an application for a certificate, to take into account all matters that appear to it to be relevant. In particular, the Board is enjoined to consider the availability of power for the line, the existence of markets, the economic feasibility of the line, the financing and any public interest.

Section 17 of the Act allows the Board to change, alter or vary a certificate with the approval of the Governor-in-Council.

B.C. Hydro sought to have Certificate EC-29 modified or replaced. This certificate was issued by the Board some 20 years ago, shortly after the proclamation of the Act, when all international power lines existing at that time were first certificated. It has not been amended since it was issued. In these circumstances the Board asked the Applicant to supply all the information which would be required in support of an application for a new certificate before a decision was made as to whether Certificate EC-29 might best be modified or alternatively replaced.

The evidence showed clearly that this power line is a distribution circuit which provides a border accommodation to a small portion of the service area of Puget Sound Power and



Light Company in the United States. Because it is an existing line which has been in operation for many years, the availability of power for the line, the existence of markets, economic feasibility and the financing are not in question.

The Board is satisfied that the environmental impact of the changes made to the international power line is negligible.

The evidence showed that this distribution area, including the export loads, could no longer be supplied by a distribution feeder originating in the Delta substation. The Board, therefore, is satisfied that the international power line should now be deemed to originate at the Tsawwassen substation.

Many notices of intervention were filed in reference to both the licence and certificate parts of the application. However, no submissions or presentations were made in respect of the application to modify or replace Certificate EC-29, except that several parties rose to express "no objection" to Part B.

A matter of deep concern to the Board is that the utility had already carried out many of the changes contemplated in the application, including the increasing of the operating voltage to 25 000 volts, before the hearing commenced. The evidence showed that these changes had long been planned for late 1979 and clearly ample time elapsed



during which an application could have been made to the Board for prior approval. It is incumbent upon an Applicant seeking approval for changes in respect of a certificate or licence to ascertain the amount of time which may be required by the Board to process the application and to file the application in sufficient time.

The Board accepts that it was desirable to upgrade this system before the 1979-80 winter peak and recognizes that, in proceeding with the upgrading of the Tsawwassen international power line without the prior approval of the Board, the Applicant's technical staff might not have realized that action was being taken in contravention of the NEB Act. However, it is incumbent upon holders of National Energy Board certificates and licences to observe the various terms and conditions of certificates and licences held by them.

The Board admonishes B.C. Hydro to conduct its business in such a way that breaches of the NEB Act do not occur in the future.

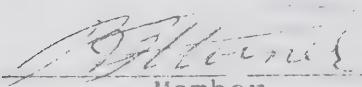


Summary

The Board has given careful consideration to all the evidence presented and is prepared to recommend to the Governor in Council that an amending order to Certificate of Public Convenience and Necessity EC-29, in the form attached as Appendix 2 to this report, be issued to B.C. Hydro.

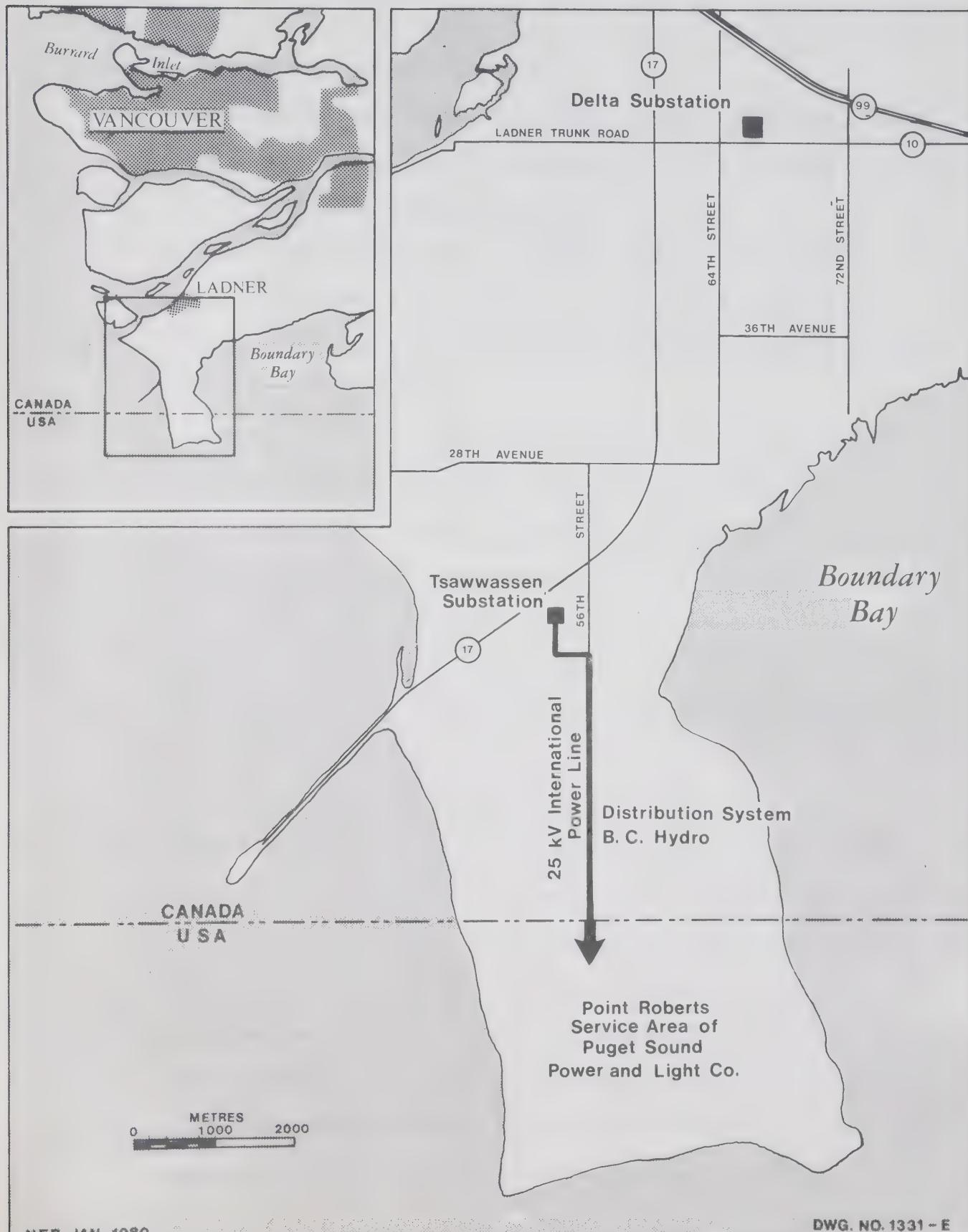
  
\_\_\_\_\_  
Presiding Member

  
\_\_\_\_\_  
Member

  
\_\_\_\_\_  
Member



# BRITISH COLUMBIA HYDRO AND POWER AUTHORITY INTERNATIONAL POWER LINE





AMENDMENTS TO CERTIFICATE EC-29

The Certificate would be amended by:

1. striking out the words "NATIONAL ENERGY BOARD ACT, 1959" where they occur therein and substituting therefor the words "NATIONAL ENERGY BOARD ACT";
2. striking out the words "BRITISH COLUMBIA ELECTRIC RAILWAY COMPANY LIMITED" where they occur therein and substituting therefor the words "BRITISH COLUMBIA HYDRO AND POWER AUTHORITY";
3. striking out the word "DELTA" where it occurs therein and substituting therefor the word "TSAWWASSEN";
4. striking out the words "international power line designated 12.53DE" where they occur therein and substituting therefor the words "international power line designated 25F52 Tsawwassen";
5. striking out the words "The line has a length of 7.0 miles within Canada and consists of one 3-phase circuit of three conductors of 266,800 circular mills ACSR operating at 60 cycles with approximately 12,000 volts between phase wires" and substituting therefor the words "The line has a length of 4.46 kilometres within Canada and consists of one 3-phase circuit of an underground cable of 750 000 circular mils aluminum from the substation and three conductors of 266 800 circular mils ACSR overhead operating at 60 hertz with approximately 25 000 volts between phase wires";



6. attaching the following:

"This certificate is subject to the following terms and conditions:

1. B.C. Hydro shall not make any changes in the international power line or in its terminal facilities at Tsawwassen substation or in its metering facilities without the prior approval of the Board."





